

This listing of claims will replace all prior versions and listings of claims in the application.

**LISTING OF CLAIMS**

1-12. **Cancelled**

13. **(Currently Amended)** ~~An assembly (40) as set forth in claim 10~~ A suspension assembly in an automobile vehicle comprising:

a support frame;

a control arm movable relative to said support frame;

a torsion bar connected to said control arm for resisting movement of said control arm relative to said support frame;

an adjustment lever connected to said torsion bar for placing said torsion bar in torsion;

a torsion bar connection between said adjustment lever and said torsion bar for connecting said adjustment lever to said torsion bar at a plurality of primary drive positions at first angular increments relative to one another; and

an indexing system operatively disposed between and directly interconnecting said torsion bar connection and said adjustment lever for positioning said adjustment lever at a plurality of intermediate drive positions at second angular increments, said second angular increments being smaller than said first angular increments.

wherein said indexing system includes a hub independent of said adjustment lever and including said torsion bar connection to said torsion bar at said first angular increments;

wherein said indexing system includes a hub connection between said hub and said adjustment lever to position said hub angularly relative to said adjustment lever at said second angular increments;

wherein said indexing system includes at least one tooth extending radially from said hub and a tooth cavity in said adjustment lever for receiving said at least one tooth; wherein said tooth cavity ~~(166, 266, 366, 466, 566, 658)~~ extends angularly a greater degree than said tooth ~~(184, 276, 388, 478, 578, 678)~~ for allowing said hub ~~(174, 274, 374, 474, 574, 674)~~ to rotate relative to said adjustment lever ~~(150, 250, 350, 450, 550, 650)~~.

14. **(Original)** An assembly (40) as set forth in claim 13 including an adjustment device (268) interacting between said adjustment lever (250) and said tooth (276) for adjusting the angular position of said hub (274) relative to said adjustment lever (250) through an infinite number of said intermediate drive positions within the angular extent of said tooth cavity (266).

15. **(Original)** An assembly (40) as set forth in claim 14 wherein said adjustment device (268) includes a bore (271) in said adjustment lever (250) and a screw (272) extending through said bore (271) to engage said tooth (276) and adjust the angular position of said hub (274).

16. **Cancelled**

17. **(Currently Amended)** An assembly (40) as set forth in claim ~~[[16]]~~ 1 wherein said at least one tooth cavity presents a generally triangular configuration having two sides and a rounded bottom interconnecting said two sides, and wherein one ~~[[660]]~~ of said two sides slopes at a degree different than the other side ~~[[662]]~~.

18-28. **Cancelled**

29. **(Currently Amended)** An adjustment lever ~~(150, 250, 350, 450, 550, 650)~~ as set forth in claim 28 for applying torsion to a torsion bar for resisting movement of a control arm relative to a support frame in a vehicle; said adjustment lever comprising:

a torsion bar connection for connecting said adjustment lever to the torsion bar at a plurality of primary drive positions at first angular increments relative to one another;

an indexing system operatively disposed between and directly interconnecting said torsion bar connection and said adjustment lever for positioning said adjustment lever at a plurality of intermediate drive positions at second angular increments, said second angular increments being smaller than said first angular increments;

wherein said indexing system includes a hub independent of said adjustment lever and including said torsion bar connection for connection to the torsion bar;

wherein said indexing system includes a hub connection between said hub and said adjustment lever to position said hub angularly relative to said adjustment lever at said second angular increments;

wherein said indexing system includes at least one tooth extending radially from said hub and a tooth cavity in said adjustment lever for receiving said at least one tooth; and

wherein said tooth cavity ~~(166, 266, 366, 466, 566, 658)~~ extends angularly a greater degree than said tooth ~~(184, 276, 388, 478, 578, 678)~~ for allowing said hub ~~(174, 274, 374, 474, 574, 674)~~ to rotate relative to said adjustment lever ~~(150, 250, 350, 450, 550, 650)~~.

30. **(Original)** An adjustment lever (250) as set forth in claim 29 including an adjustment device (268) interacting between said adjustment lever (250) and said tooth (276) for adjusting the angular position of said hub (274) relative to said adjustment lever (250) through an infinite number of said intermediate drive positions within the angular extent of said tooth cavity (266).

31-35. **(Cancelled)**

36. **(New)** An apparatus for extending the useful life of a torsion bar in a vehicular suspension assembly, said apparatus comprising:

a support frame;

a control arm movable relative to said support frame for carrying a wheel;

a torsion bar extending between a control end and an adjustment end, said control end directly connected to said control arm for torsionally resisting movement of said control arm relative to said support frame, said anchored end of said torsion bar including a hex-shaped fitting consisting of six points arranged in equal angular increments of  $60^\circ$  relative to one another;

an adjustment lever supported in said frame and pivotally moveable within a limited range of less than  $60^\circ$  for twisting said torsion bar so as to increase or decrease the position of said control arm relative to said frame, said adjustment lever having a pivot portion operatively connected to said adjustment end of said torsion bar and a distal swinging tip portion;

a screw adjustment mechanism operatively engaging said tip portion of said adjustment lever for precisely and infinitely inducing twist in said torsion bar within the limited range of pivotal movement of said adjustment lever; and

an intermediate hub removably disposed in said pivot portion of said adjustment lever, said hub having a hex-shaped opening adapted for mating engagement with said hex-shaped fitting on said adjustment end of said torsion bar and a toothed outer periphery consisting of equally angularly spaced apart teeth slideably received in a complimentary-shaped pocket in said pivot portion of said adjustment lever, whereby the useful life of a fatigued torsion bar can be extended by completely disengaging said hub from said adjustment lever and said torsion bar, and then re-engaging said hub with said torsion bar and said adjustment lever in a new relative

position resulting in a slight incremental adjustment of said tip portion relative to said torsion bar so that said screw adjustment mechanism remains operative to infinitely induce twist in said torsion bar while said adjustment lever remains supported in said frame within its limited range of pivotal movement.

37. **(New)** An apparatus as set forth in claim 36 wherein each said tooth on said outer periphery of said hub is aligned along an imaginary radial passing centrally therethrough, and wherein none of said six points of said hex-shaped opening coincide with said imaginary radial passing centrally through each of said respective teeth in said pocket, whereby the useful life of a fatigued torsion bar can be extended by completely disengaging said hub from said adjustment lever and then re-engaging said hub with said adjustment lever in a new relative position resulting in a slight incremental adjustment of said tip portion relative to the torsion bar.

38. **(New)** An apparatus as set forth in claim 36 wherein the number of said teeth on said outer periphery of said hub is not equal to the number of said points in said hex-shaped opening.

39. **(New)** An apparatus as set forth in claim 36 wherein said hub includes exactly seven teeth and said pocket in said adjustment arm includes exactly seven tooth cavities for slideably receiving said seven teeth of said hub.

40. (New) An adjustment lever for extending the useful life of a torsion bar in a vehicular suspension assembly, said lever comprising:

a body having a pivot portion at one end thereof, a tip portion at another end thereof, and a central lever portion extending between said pivot and tip portions, said pivot portion including a pocket formed by a toothed inner periphery defined by a plurality of equally angularly spaced apart teeth, each said tooth aligned along a respective imaginary radial passing centrally therethrough;

an intermediate hub removably disposed in said toothed pocket of said body, said hub having a hex-shaped opening and a toothed outer periphery consisting of equally angularly spaced apart teeth slideably received in said pocket of said body, said hex-shaped opening defined by six points arranged in equal angular increments of  $60^\circ$  relative to one another; and

wherein none of said six points of said hex-shaped opening coincide with said imaginary radial passing centrally through each of said respective teeth in said pocket, whereby the useful life of a fatigued torsion bar can be extended by completely disengaging said hub from said adjustment lever and then re-engaging said hub with said adjustment lever in a new relative position resulting in a slight incremental adjustment of said tip portion relative to the torsion bar.

41. (New) An adjustment as set forth in claim 40 wherein the number of said teeth is not equal to the number of said points in said hex-shaped opening.



42. (New) An adjustment lever as set forth in claim 40 wherein said hub includes exactly seven teeth and said pocket in said adjustment arm includes exactly seven tooth cavities for slideably receiving said seven teeth of said hub.

43. (New) A method for extending the useful life of a fatigued torsion bar in a vehicular suspension assembly, said method comprising the steps of:

providing a vehicular support frame and a control arm;

movably supporting the control arm relative to the support frame;

providing a torsion bar having a control end and an adjustment end;

connecting the control end of the torsion bar to the control arm;

providing an adjustment lever having a removable intermediate hub and a distal swinging tip portion;

supporting the adjustment lever in the frame for restricted pivotal movement within a limited range of less than 60°;

connecting the adjustment end of the torsion bar to the hub;

turning a screw adjustment mechanism to selectively displace the tip portion of the adjustment lever and thereby precisely and infinitely induce twist in the torsion bar within the limited range of movement of the adjustment lever;

said step of turning a screw adjustment mechanism including fully displacing the adjustment lever to either limit of its range of movement;

and completely removing the hub from the adjustment lever and from the torsion bar, and then re-engaging the hub with the torsion bar and the adjustment lever in a new relative position resulting in a slight incremental adjustment of the tip portion relative to the torsion bar so that the adjustment lever is repositioned somewhere within said limited range of less than 60° and spaced from either limit of its range of movement, whereby the useful life of a fatigued torsion bar can be extended without sacrificing the precise and infinite calibration function of the screw adjustment mechanism.

44. **(New)** A method as set forth in claim 43 wherein said step of re-engaging the hub includes meshing complimentary-shaped teeth carried on the hub and the adjustment lever.

45. **(New)** A method as set forth in claim 43 further including the step of turning over the hub between said steps of removing the hub and re-engaging the hub.